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Nuclear Weapon Deterrence Principles

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Nuclear Weapon Deterrence Principles

Presentation Overview:

- Deterrence Basics
- Key Elements of Nuclear Deterrence
- Nuclear Deterrence Theories
- Nuclear Deterrence Cold War
- Nuclear Deterrence Today
- New Deterrence Challenges
- Questions



Deterrence Basics

- The prevention from action by fear of the consequences
- A state of mind brought about by the existence of a credible threat of unacceptable counteraction

**Joint Publication 1-02, Department of Defense
Dictionary of Military and Associated Terms**



Nuclear Deterrence is Unique

- Political impact of nuclear weapons use
 - Psychological dimension
 - Threat of unimaginable horror
- Severity of consequences
 - Physical dimension
 - Destructiveness on an inconceivable scale

Nuclear Deterrence is Complex

- “The goal for the military might of the United States and its allies since the late forties has been to create an effective structure of deterrence that will preclude outright military assault....the heart of deterrence lies in the development of strategies and forces providing a credible response in the event of direct military assault. The need for this planned response that is both credible and effective is a **frequently misunderstood** aspect in the successful development of a defense posture.”
- James Schlesinger, former Secretary of both Defense and Energy and Director of the Central Intelligence Agency
- **A Primer on U.S. Strategic Nuclear Policy, Sandia Report, 2007**

Nuclear Deterrence is Complex

- “In the absence of a credible response, deterrence becomes a façade. For, if deterrence were to fail, there would be no effective counter. And such a condition could in periods of tension make assault attractive. A credible military response as the essential element in deterrence has sometimes been referred to as a war-fighting capability. **This term has unfortunately lent itself to misunderstanding.**”
- James Schlesinger, former Secretary of both Defense and Energy and Director of the Central Intelligence Agency
- **A Primer on U.S. Strategic Nuclear Policy, Sandia Report, 2007**

Nuclear Deterrence is Complex

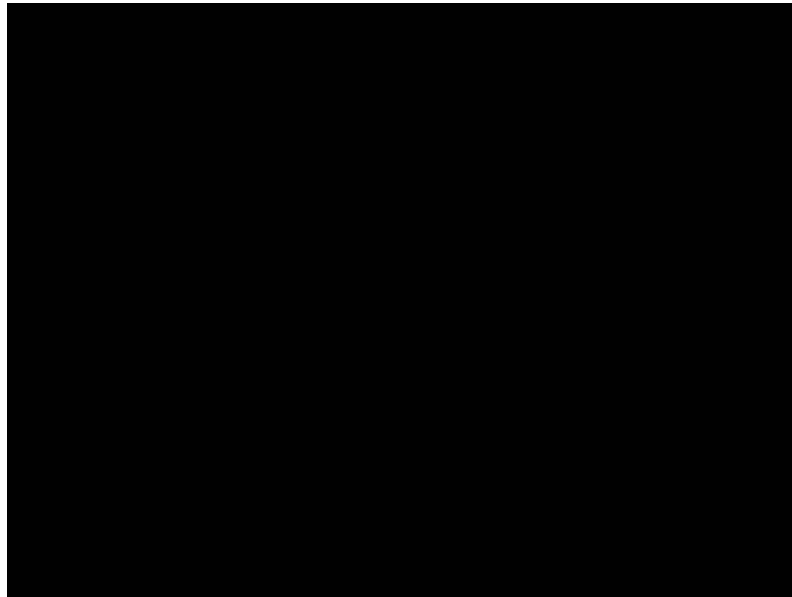
- “The objective of such a capability is to deter—i.e. to avoid war-fighting by making deterrence effective. It might be more illuminating to refer to that credible military response as a **peace-maintaining capability**. The underlying point, however, is that **the sharp distinction frequently drawn between deterrent and war-fighting capabilities is a bogus one**. Yet, this semantic confusion has been the source repeatedly of obfuscation in public discussion. It is the capacity to threaten a credible response that makes deterrence effective.”
- James Schlesinger, former Secretary of both Defense and Energy and Director of the Central Intelligence Agency
- **A Primer on U.S. Strategic Nuclear Policy, Sandia Report, 2007**

Key Elements of Nuclear Deterrence

- Communication
- Credibility
- Political Will
- Perception

Key Elements - Communication

Clarity of message



Key Elements - Communication

- Overt versus covert
 - Example: NATO



Key Elements - Communication

- Ambiguous versus unambiguous
 - Example: US Policy of Calculated Ambiguity
- Past US retaliation policy involved warning a potential adversary that they can expect an “overwhelming and devastating” response if a weapon of mass destruction is used against the United States and its allies.
 - Implied in this threat is the use of nuclear retaliation. By not identifying a specific response, maximum flexibility is gained through an unlimited range of response options. It enhances deterrence by keeping adversaries guessing.

Key Elements - Credibility and Political Will

- Credibility – “Existential Deterrence” (North Korea)
 - Physical presence?
 - Demonstration?
- Political will
 - Rationality
 - Determination



**Soviet Sandal SS-4 missile
on parade at Red Square**

Key Elements Perception

- An adversary nation is
 - only deterred if they **think**
 - they're deterred.
-
- Example 1: Language
-
- Example 2: Actions



Nuclear Deterrence Concepts

- **Counter Force**

- Targeting an element of military infrastructure
- Troop concentrations, military bases, missile launch facilities, etc.

- **Counter Value**

- Targeting an element of national infrastructure
- Cities, resource concentrations, civilian populations, etc.

- **First Strike**

- Ability to strike the enemy without warning
- Preempts the enemy's ability to retaliate with nuclear force

- **Second Strike**

- Requires the ability to survive the initial attack
- Retaliatory



Nuclear Deterrence Theories

- Minimum nuclear deterrence
- Maximum nuclear deterrence
- Core deterrence
- Extended deterrence
- Nuclear deterrence through assured neutralization

Nuclear Deterrence Theories - Minimum Nuclear Deterrence

- **Communication**
 - Ambiguous
- **Credibility**
 - Some level of demonstrated capability
- **Political Will**
 - Very determined
 - Strike a counter value target
- **Perception**
 - Paralyze or change the decision process of an adversary

The threat that a first strike would be met with a measured, but unacceptable second strike

Examples: France, UK, China, Rogue States

Nuclear Deterrence Theories - Maximum Nuclear Deterrence

- **Communication**
 - Overt
 - Transparent
- **Credibility**
 - Nuclear capability well demonstrated
 - Physical presence obvious
 - Need to maintain a second strike capability
- **Political Will**
 - Both sides committed
 - Determination clear
 - Mutually Assured Destruction
- **Perception**
 - Both sides view nuclear engagement similarly

Threat of a massive retaliation against counter value and counter force targets in the event of a first strike

Examples: United States and Russia

Nuclear Deterrence Theories – Core Nuclear Deterrence

- **Communication**
 - Overt
 - Unambiguous
- **Credibility**
 - Some nuclear capability demonstrated
 - Physical presence obvious
 - Need to maintain a second strike capability
- **Political Will**
 - Extremely determined
- **Perception**
 - Nuclear self defense

Nuclear weapons are used to
defend sovereign territory

Examples: All nuclear powers

Nuclear Deterrence Theories - Extended Nuclear Deterrence

- **Communication**
 - Ambiguous
- **Credibility**
 - Nuclear capability well demonstrated
 - Physical presence obvious
 - Need to maintain a second strike capability
- **Political Will**
 - Determination unclear
- **Perception**
 - Maintain status quo

Nuclear weapons will be used to defend the U.S. and its allies in the event of a nuclear attack, as well as deployed forces

Examples: NATO – Attack on one is an attack on all

Nuclear Deterrence Theories – Denial

Establishing defenses that neutralize or mitigate a nuclear attack



Prepare



Respond

Recover

Civil Defense

Integrated Ballistic Missile Defense System
Airborne Laser
Aegis ABM Launch
Anti-Ballistic Missile (ABM)



Nuclear Deterrence – Cold War

- Bipolar conflict
- Between determined superpowers
- Rationality of adversary understood
- Adversary tied to a geographical location



Irrationality of MAD preserved peace

Nuclear Deterrence Cold War

- Herman Khan
 - Civil Defense
 - Large Stockpile
 - Counterforce Targets
- Thomas Schelling
 - Minimal Civil Defense
 - Small Stockpile
 - Counter Value Targeting “Balance of Terror”

Nuclear Deterrence Today

- Nuclear adversary more diverse
 - Rogue States
 - Non-state Actors
- Rationality of adversary in question
- Adversary not necessarily tied to geographical location



Nuclear Deterrence Challenges

Other current challenges

What is the correct policy to achieve nuclear deterrence?

Stockpile size: small or large?

Nuclear Weapons Complex 2030

Stockpile Stewardship

Yield: low versus high?

Nuclear Non-proliferation



Questions

